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EXAMINER

MALEKZADEH, SEYED MASOUD

ART UNIT

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

DETAILED ACTION

Response to Amendment

In view of the after final document filed on 12/24/2008, following rejections are maintained for the reason of record, as given in the previous office action. The bases for these rejections are the same as given in the office action, mailed on 10/17/2008.

- Rejection of claims 1-4 and 6-8 under 35 U.S.C. 103(a) as being unpatentable over Murata et al. (US 6,468,618) in view of Kamitahara et al. (JP 40520075)
- Rejection of claim 5 under 35 U.S.C. 103(a) as being unpatentable over Murata et al. (US '618) in view of Kamitakahara et al. (JP '075), and further in view of Fujita (JP 2001-297488)
- Rejection of claim 9 under 35 U.S.C. 103(a) as being unpatentable over Murata et al. (US '618) in view of Kamitakahara et al. (JP '075), and further in view of Shibata (JP 2002-83450)

Response to Arguments

Applicant's arguments filed on 12/24/2008 have been fully considered but they are not persuasive.

Applicant argue that the office action relies on all of layers (31, 36, 33, and 34) as disclosing the claimed subject matter, in order to show

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three layers each formed in the nickel. However, if the rejection must relies on all of these layer (31, 36, 33, and 34), then it does not disclose a stamper having each of uppermost , middle, and lowermost formed of the same metal material and the claimed pattern on a surface thereof for use in molding an optical disc substrate. As can be seen from the figure, FIG. 5M includes both the mother portion (31) and the heat insulated stumper (21) (Fig. 5N). (See remarks, page 3, lines 20-24) Furthermore, applicant argues that if layers 31, 33, 36, and 34 are interpreted as disclosing the claimed stamper, then it does not have the claimed "pattern on a surface thereof for use in molding an optical disc substrate." (See remarks, page 4, lines 2-5)

This is not found persuasive because Murata et al. (US '618) teach a stamper for molding an optical disk base comprising a mother portion (31), as a lower most section made of nickel, a nickel layer (36) as an uppermost section, and a middle section comprising a heat insulating layer (34) formed on the thick nickel layer (33). (See lines 30-61, column 5, also figure 5M) Therefore, the prior art clearly teaches the three sectioned structure of the molding apparatus. Also, Applicant's attention is drawn to the point that claim 1 recites three sections for the molding apparatus and not three layers. Therefore, the heat insulating layer (34) with the thick nickel layer (33) together form a middle section in the Murata et al. (US '618) apparatus which fulfill this limitation of the claim

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1 that a middle section having a heat conductivity lower than the uppermost section.

Also, in respect to applicant's argument that "the claimed pattern on a surface thereof for use in molding an optical disc substrate", applicant's argument was not found persuasive because the claim recites "a pattern on a surface" and claim does not limit the claim wherein to which surface section of the stamper the pattern is located. Also, Murata et al. (US '618) clearly teach a transfer surface pattern (30) as a pattern on the surface of the mother base (31) (see column 5, lines 65-67), which in fact disclose the claimed limitation of "a pattern on a surface thereof". Further, Murata et al. (US '618) teaches the master stamper (1) which is made up of the Ni layer (6), heat insulating layer (7), and Ni layer (9) include a transfer surface (11) as a pattern on its front surface for molding a glass master. (See lines 7-13, column 5) Also applicant's attention is drawn to the point that the recited limitation "for use in molding an optical disc substrate" is treated as intended use which does not give a patentable weight to the claimed apparatus.

Applicants further argue that the office action states that the motivation to combine the heat insulating layer of Kamitakahara with the stamper of Murata is "to prevent the generation of uneven flaws or transfer irregularities in the fine pattern of the substrate for the data." However, applicants submit that this is a problem specific to flexible and rolled form stamper. (see remarks, page 3, lines 6-10); furthermore,

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applicant argues that "one skilled in the art would not be motivated to look outside of Murata to find a different heat insulating layer to provide the same function of thermal insulation that is already included.

This is not found persuasive because, as also recited in the previous rejection, Murata et al. ('618) teach all the structural limitations of a heat insulating stamper; however, fails to teach heat resisting substances are dispersed in the metal material of the middle section. Therefore, for the rejection of claim 1, Kamitakahara is clearly combinable with Murata et al. ('618) because both the prior arts are within the same technology, and Kamitakahara clearly teaches a roll stamper apparatus in which the apparatus comprises a flexible stamper (23) as an upper most section, a heat insulating porous layer (22) as a middle layer, and a mirror surface roller (21), as a lowermost section, in which the porous layer (22) is located between the stamper (23) and a mirror surface roller (21). (See abstract), and air is dispersed within the voids of the porous material in which air thermal conductivity of the air is very small; therefore, the voids which are filled with air act as heat resisting substances dispersed in the metal material of the middle section. Moreover, the Kamitakahara teaches a strong motivation to be combined with Kamitakahara, as recited in the previous office action; therefore, Murata et al. ('618) in view of Kamitakahara clearly teach a heat insulating stamper as claimed in claim 1.

Moreover, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992)

Also, applicant's arguments in respect to claims 5 and 9 were fully considered, but were not found persuasive because first of all claims 5 and 9 are dependent to a rejected independent claim 1. Therefore, these claims maintain rejected and second, as clearly recited in the previous office action, Fujita (JP '488) remedy the deficiency of combined teaching of Murata in view of Kamitakahara to reject claim 5 and also, Shibata (JP 2002-083450) remedy the deficiency of combined teaching of Murata in view of Kamitakahara to reject claim 9.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Seyed Masoud Malekzadeh whose telephone number is 571-272-6215. The examiner can normally be reached on Monday – Friday at 8:30 am – 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven P. Griffin, can be reached on (571)

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272-1189. The fax number for the organization where this application or proceeding is assigned is 571-273-8300.

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/SEYED M. MALEKZADEH/

Patent Examiner

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/Steven P. Griffin/

Supervisory Patent Examiner, Art

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